

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A semiconductor device, comprising:

a diode, including:

an insulating substrate;

a p-type silicon layer, ~~the p-type silicon layer~~ containing germanium, ~~and the p-type silicon layer~~ being disposed on the insulating substrate; and an n-type silicon layer joined to the p-type silicon layer ~~and the layer~~, ~~the n-type silicon layer being disposed on the insulating substrate~~ ~~substrate; and~~ ~~the p-type silicon layer being surrounded by the n-type silicon layer.~~

2. (Currently Amended) A semiconductor device, comprising:

a diode, including:

an insulating substrate;

a p-type silicon layer, the p-type silicon layer containing germanium; an intrinsic silicon layer joined to the p-type silicon layer; and an n-type silicon layer joined to the intrinsic silicon layer,

~~the p-type silicon layer, the intrinsic silicon layer and the n-type silicon layer being disposed on the insulating substrate~~,  
~~substrate,~~

~~the intrinsic silicon layer being surrounded by the n-type silicon layer, and~~  
~~the p-type silicon layer being surrounded by the intrinsic silicon layer.~~

3. (Canceled)

4. (Original) The semiconductor device according to claim 1, having a plurality of diodes, and further comprising:

a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

5. (Original) The semiconductor device according to claim 4, comprising:
  - a coil antenna coupled to one side of the bridge-rectifier circuit; and
  - a smoothing capacitor coupled to the other side of the bridge-rectifier circuit,

the coil antenna generating an alternating-current voltage by electromagnetic induction;

the bridge-rectifier circuit rectifying the alternating-current voltage supplied thereto into a direct-current voltage; and

the smoothing capacitor smoothing the direct-current voltage supplied thereto into a constant voltage.

6-7. (Canceled)

8. (Original) The semiconductor device according to claim 2, having a plurality of diodes, and further comprising:

    a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

9-11. (Canceled)